REMARKS

Claims 12-19 were pending in this application. Claims 12 and 16 have been amended to even more clearly define the invention. Support for the amendment to claims 12 and 16 can be found at, e.g., page 5, fourth full paragraph, of the specification. No new matter has been presented. Upon entry of this amendment, claims 12-19 will remain pending herein and are believed to be in condition for allowance for the reasons stated below.

In the Office Action,

- Claims 12-19 were rejected under 35 U.S.C. §103(a) as being unpatentable over Antia (US 6,347,124) in view of Richards (US 2007/0286272).

This ground of rejection is respectfully traversed.

Preliminarily, Examiner Doan is thanked for the courtesies extended to Applicant's representative during several informal contacts. The final outcome of those contacts included the recognition and acknowledgment that Antia fails to disclose an expressly recited feature of the claims and that the newly-cited Richards reference does not cure Antia's deficiency.

More specifically, and as noted in Applicant's successful *Request for Pre-Appeal Brief Review*, the Examiner asserts that Antia discloses "monitoring the probability distribution of the amplitudes of the scaled signal values" in col. 5, lines 10-45 of Antia's specification. This assertion is unjustified. In col. 5, lines 10-45, Antia only discloses how soft decision process SDP 34 generates soft decision bits, which represent the signal bits of each burst package, by using a scale factor. While the soft decision bits of Antia are scaled signal bits, those scaled signal bits are <u>not</u> the "<u>probability distribution of the amplitudes of the scaled signal values</u>," as required by step (b) of claim 12. In fact, and significantly, Antia does not disclose, at all, a step of monitoring the probability distribution of the amplitudes of <u>scaled</u> signal values.

Furthermore, since Antia does not disclose performing a step of monitoring the probability distribution of the amplitudes of the scaled signal values, it follows that Antia can not adjust the scale factor according to the probability distribution of the amplitudes of the **scaled** signal values (or a "parameter" based on the probability distribution, as now claimed), as

4

required by step (c) of, e.g., claim 12. In fact, in Antia's teaching, the scale factor is generated only based on an average signal magnitude of signal bits, which are **pre-scaling**, of each burst package. The scale factor in Antia's teaching is not adjusted according to the probability distribution of the amplitudes of the **scaled** signal values, i.e., post-scaling.

To still further emphasize the point, Antia only describes techniques where the scale factor is derived from signal values **pre-scaling**. This is clear from Figure 3 of Antia where the calculation of the average signal value (step 44) applies to the signal **prior** to the scaling being applied (step 48). This is also clear from the description in Antia at columns 4 and 5. Equation 1 therein clearly indicates that the average value is derived from the signal s(n) which is **before** the scaling is applied (the scaling is described in equation 3 and shows the scaled signal s^ being derived from s).

Thus, there can be no doubt that Antia fails to teach both steps (b) and (c) of independent claim 12. And, Richards adds nothing to overcome the noted deficiencies of Antia.

Claim 16 should be allowable for at least the same reasons as claim 12.

Nevertheless, in an effort to advance the prosecution of this application, Applicant has amended the claims to recite that a "parameter" generated in connection with monitoring the probability distribution of the amplitudes is "not grossly effected by saturation." This feature of the invention is described on pages 4 and 5 of the specification. It is submitted that this feature is also not disclosed or suggested by Antia or Richards.

Further, and in regard to claims 13 and 17, the Examiner's reliance on col. 5, lines 1-45 of Antia is misplaced. There is nothing in that passage that teaches "calculating a **complementary cumulative** probability density function for a signal value magnitude," as required by claims 13 and 17.

In view of the foregoing all of the claims in this case are believed to be in condition for allowance. Should the Examiner have any questions or determine that any further action is desirable to place this application in even better condition for issue, the Examiner is encouraged to telephone Applicant's undersigned representative at the number listed below.

Dated: February 9, 2010   Respectfully submitted by:

EDELL, SHAPIRO & FINNAN, LLC   /Lawrence D. Eisen/
CUSTOMER NO. 27896
1901 Research Boulevard, Suite 400   Lawrence D. Eisen
Rockville, MD 20850   Reg. No. 41009
(301) 424-3640